NHDOT SPR2 PROGRAM
RESEARCH PROGRESS REPORT

INSTRUCTIONS:

Project Managers and/or Principal Investigators should complete a progress report at least every three months during the project duration. Reports are due the 5th of the month following the end of the quarter. Please provide a project update even if no work was done during this reporting period.

Project #		**Report Period** Year: 2017 X Q1 (Jan-Mar) ☐ Q2 (Apr-Jun) ☐ Q3 (Jul-Sep) ☐ Q4 (Oct-Dec)
Project Title: Active Transportation Accounting: A three-pronged approach to developing metrics for project prioritization, monitoring, safety assessment, and evaluation		
Project Investigator: Amy Villamagna **Phone: 603-535-2217**		**E-mail: amvillamagna@plymouth.edu**
Project Start Date: 1 Dec 1, 2016	**Project End Date: 31 March 31, 2018**	**Project schedule status:** ☐ On schedule ☐ Ahead of schedule ☐ Behind schedule

Brief Project Description:

This project will leverage *a)* existing datasets (participatory mapping of facility activity through the Strava App), *b)* statewide on-the-ground bike-ped monitoring initiatives (conducted in partnership with the 9 regional planning commissions in NH) (Tufts et al. 2015), *c)* efforts to develop and apply a Level of Traffic Stress (LTS) model for bicycling (MTI Report II-19), and incorporate novel public participatory GIS approaches to assess patterns of current bicycle activity and identify potential barriers to access and participation.

Progress this Quarter (include meetings, installations, equipment purchases, significant progress, etc.):

- Further summarized and statistically analyzes responses from the Public Participatory GIS (PPGIS) surveys.
- Conducted connectivity analysis for focal regions and combine Strava-connectivity analysis of road segment prioritization for focal regions.
- Communicated and coordinated with all RPCs to collect infrastructure and ground count data from 2015 and 2016 for second Strava comparison (the first was already completed with 2014 data)
- Held LTS meeting at CNHRPC. Attendance included: Amy Villamagna, Laura Getts, Craig Tufts, Ryan Friedman, Scott Boggle, Matt Waitkins. Objective was to review LTS model and compare across pilot regions and NH DOT focal regions.
- Revision of LTS model based on feedback during the above meeting
- Development of LTS coded tool in Arc GIS

Items needed from NHDOT (i.e., Concurrence, Sub-contract, Assignments, Samples, Testing, etc…):

TAG meeting will occur on May 25, 2017

Anticipated research next 3 months:

- Compare survey results of baking barriers to LTS patterns (chokepoints)
- Evaluate increases in bike activity potentially attributed to road improvements and paving
- Evaluate connectivity (accessibility) to key destinations using LTS model

Circumstances affecting project: Describe any challenges encountered or anticipated that might affect the completion of the project within the time, scope, and budget, along with recommended solutions to those problems.

There was more than a 3-month delay in receiving funding for this project. This required PSU to cover expenses without guarantee of funding. Therefore, expenditure was minimized to be prudent. We suspect this may result in the need for a 2 month extension to the project funding cycle; however, this need will be reassessed based on progress over the next 3 quarters. I expect progress to slow slightly during Q3 as Laura Getts, lead GIS analyst, will be graduating and has

accepted another job that starts June1. I am in the process of recruiting a new graduate student, but have yet to receive an application from a suitable candidate. Likewise, there has been some faculty turnover at PSU that has delayed by ability to take the teaching course release built into this budget. This may not occur until Spring 2018, or Fall 2018 if an extension is needed.

Tasks (from Work Plan)	Planned % Complete	Actual % Complete
Compare Strava manual counts from May 2014/15 and Sept 2014/15	100%	80%
Apply LTS to focal regions (the model is now revised and being rerun for verification)	100%	90%
Compare survey results of biking barriers (maps) to Strava patterns	50%	50%
Evaluate biking accessibility to key community amenities using LTS model	25%	25%